

Patent Claims

1. A corner joint (1) for frames of wall elements, doors or windows, comprising a corner connector (2) and two mitered hollow sections (3, 9), characterized in that the corner connector (2) comprises at least two connecting parts (5, 10) which can be introduced into a hollow space (4) of a hollow section (3, 9) and are each designed with a fastening arrangement (6) for connection to in each case a hollow section (3, 9), recesses (34) and/or distribution channels (38) for receiving and distributing adhesive being provided on at least one boundary surface of a connecting part (5, 10), and in that a connecting arrangement (7) for connecting the connecting parts (5, 10) each fastened to a hollow section (3, 9) is provided, connecting arrangement (7) and/or connecting parts (5, 10) being designed in such a way that the mitered hollow sections (3, 9) can be pressed against one another under prestress during the connection operation.
2. The corner joint (1) as claimed in claim 1, characterized in that the connecting parts (5, 10) are provided with a miter, the miter angle corresponding to that of the respective associated hollow sections (3, 9).
3. The corner joint as claimed in claim 2, characterized in that at least one of the connecting parts (5, 10) is fastened in the hollow section (3, 9) at a distance (a, a') from the miter surface (8) of a hollow section.
4. The corner joint as claimed in one of claims 1 to 3, characterized in that the respective hollow section (3, 9) and the respective connecting part (5, 10) are screwed and/or glued together with one another.

5. The corner joint as claimed in one of claims 1 to 4, characterized in that the hollow section (3, 9) is fastened to the connecting part (5, 10) by means of self-tapping screws (16).
6. The corner joint as claimed in one of claims 1 to 5, characterized in that the connecting parts (5, 10) are screwed and/or glued together with one another.
7. The corner joint as claimed in one of claims 1 to 6, characterized in that the connecting parts (5, 10) comprise at least one through-hole (36), in particular a bore, running approximately at right angles to the miter for connecting the connecting parts (5, 10).
8. The corner joint as claimed in one of claims 1 to 7, characterized in that the connecting parts (5, 10) are provided with a nut (21) in the region of the through-hole (36).
9. The corner joint as claimed in one of claims 1 to 8, characterized in that the hollow section (3, 9) comprises at least one opening (39) for the injection of adhesive into the distribution channels (38, 40).
10. The corner joint as claimed in one of claims 1 to 9, characterized in that the connecting part (5, 10) comprises webs (24, 29, 30) and recesses (27, 31, 32) running in the longitudinal direction in the region of the outer side (11) and in the region of the inner side (12).
11. The corner joint as claimed in one of claims 1 to 10, characterized in that the connecting part (5, 10) comprises a

central recess (27) in the region of the outer side (11) and correspondingly two webs (24) at the side and also at least one web (29) in the region of the inner side.

12. A connecting part for producing a corner joint as claimed in one of claims 1 to 11 for frames of wall elements, doors or windows consisting of two mitered hollow sections (3, 9) and with at least two connecting parts (5, 10) which can be introduced into a hollow space (4) of a hollow section (3, 9), characterized in that the connecting part (5, 10) comprises a miter which corresponds to that of the hollow section to which the connecting part (5, 10) can be connected and a connecting arrangement (7) is provided by means of which two connecting parts (5, 10) with the hollow sections (3, 9) fastened thereto can be connected, the connecting arrangement (7) being designed in such a way that the mitered hollow sections (3, 9) can be pressed against one another under prestress during the connection operation, and in that recesses (34) and/or distribution channels (38, 40) for receiving adhesive are provided on at least one boundary surface of the connecting part (5, 10).
13. The connecting part as claimed in claim 12, characterized in that the connecting part (5, 10) comprises as the connecting arrangement (7) at least one through-hole (36), in particular a bore, for receiving a fastening element, in particular a screw (19), and in that one of the connecting parts (5, 10) comprises a complementary fastening element, in particular a nut (21).
14. A method for producing a corner joint (1) for frames of wall elements, doors or windows consisting of a corner connector (2) and at least two mitered hollow sections (3, 9), the

corner connector comprising at least two connecting parts (5, 10), characterized in that each connecting part (5, 10) is connected to the respective hollow section (3, 9) with the aid of a fastening arrangement (6) and in that the connecting parts (5, 10) each fastened to a hollow section (3, 9) are then connected to one another with the aid of a connecting arrangement (7), the mitered hollow sections (3, 9) being pressed against one another under prestress during the connection of the connecting parts (5, 10) each fastened to a hollow section (3, 9), and in that the respective hollow section (3, 9) and the respective connecting part (5, 10) are screwed and glued together with one another.

15. The method for producing a corner joint as claimed in claim 14, characterized in that at least one connecting part (5, 10) is connected to the respective hollow section (3, 9) so that a connecting part has a distance (a, a') from the miter surface (8, 14) of a hollow section (3, 9).
16. The method for producing a corner joint as claimed in claim 14 or 15, characterized in that the hollow section (3, 9) is fastened to the connecting part (5, 10) by means of self-tapping screws (16).